TEACHER GUIDELINES

# CHECK THIS OUT ACTIVITY

TIME **2 CLASSROOM PERIODS**

OVERVIEW

In working groups, students explore one topic area related to resource use and the production of waste. Groups are then split up forming new teams, each with information about the different topic areas. These new teams answer one of two questions and illustrate it using poster or dry erase board. After group presentations, students answer guided questions that link what they have learned to the audit or other motivational activity used.

## materials

- Topic Card and the five related Check This Out cards – 1 topic per group
- 6 poster or dry erase boards – 1 per group
- Markers – 1 set per group

## procedure

1. Divide students into six working groups. Groups should be as close to equal in size as possible.

2. Explain the following to the groups:

    a. Each group will learn and discuss a different topic of resource and waste management – paper and paper products; plastics and packaging; composting; household hazardous wastes; illegal dumping; or storm drain pollution.

    b. Each group will receive one Topic Card and the five related Check This Out cards.

    c. Pass out a Check This Out card to each member of your group.

    d. Follow the instructions on your group's Topic Card introducing the subject and asking questions for your group to answer.

    e. You will have 15 minutes to share the information and become experts on the topic.

    f. One member from each group will then form a new team. These new teams will answer one of two questions and illustrate the answers on poster or dry erase board.

    g. You will have 15 minutes to create your presentations.

    h. Each team will have 3 minutes to present its answers to the class.

# CHECK THIS OUT ACTIVITY CONTINUED

3. Pass out one set of cards containing one Topic Card and the five related Check This Out cards to each group.
    a. Within each group, divide up the Check This Out cards so that each person has a card. If necessary, share or double up cards to ensure that every card is used.
    b. Have each person read their Check This Out card.
    c. Have one person in the group read the introduction on the Topic Card. Then, read and answer the questions.
    d. Discuss the answers and become experts on the topic.

4. Give a 5-minute warning to the groups.

5. Divide groups into new teams. Each team should include one person from each of the topic groups.

6. Using poster or dry erase board, have each team answer and illustrate one of the following questions:
    a. Give three examples of ways that waste on land might get into the ocean and affect the ocean environment and what you can do about it.
    b. Give three examples of how consumers create waste that ends up on the ground or in the landfill and what you can do about it.

7. Give a 5-minute warning to the teams.

8. Have each team present their answers to the class.

9. Have students discuss what they learned during the activity and how it relates to what they observed during their audit or other observation activity.

GENERATION EARTH

# TOPIC CARD: PILES OF PAPER

READ THIS AS A GROUP

**1**

Score! Two points! You're doing your homework and make a mistake in the first paragraph. So, you crumple the piece of paper and toss it in the trash. Did you think about the tree that the paper came from? Trees are harvested and sent to mills and processed into lumber. The wood waste is sent on to paper mills, where it is manufactured into lunch bags, notebooks, computer paper, magazines, napkins, towels, and the list goes on and on.

**2**

Each person reads his/her Check This Out card and takes notes (you will need them later!)

**3**

As a group, answer the following questions. Hint: Each team member has different information that will help.

## think about it!

1. A California law required each city and county in California to divert 50% of its solid waste from landfills and waste-to-energy facilities by the year 2000 through source reduction, recycling and composting. Most cities did not meet this goal and filed for extensions. Why is this goal important to us as students? Give at least three reasons.

2. What's the difference between reducing, reusing and recycling our wastes? Of the three actions, which do you think is most important? Why?

3. How does buying supplies for taking notes in class, doing homework or even bringing lunch to school relate to paper and waste disposal issues?

4. What can we do to encourage manufacturers to reduce the number of trees cut down to make paper and paper products?

5. How can we encourage our classmates, friends, and family to help decrease the number of trees cut down to make paper and paper products?

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## PILES OF PAPER

1

- California generates about 14 million tons of paper a year. Of this, about 31% is recovered for recycling each year. That leaves about 9.5 million tons of paper products being disposed of in landfills each year in California. Remember this is tons!
- About 64% of all paper produced goes to landfills, yet all forms of paper (except those contaminated with food waste) are easily recycled.
- Each year, the average student produces about 112 lbs. of paper waste that ends up in landfills.
- Paper products make up about 47% of the total waste being produced at schools in Los Angeles County.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## PILES OF PAPER

2

- It takes 17 trees to make one ton of paper. About 70 million tons of raw paper are manufactured in the United States each year. (That's about 1.2 billion trees used annually in the U.S. alone.)
- Recycling all the newspapers for one Sunday would save an estimated 550,000 trees.
- Paper made from waste paper is called "post-consumer" recycled paper because it has been used and recycled instead of being added to a landfill.
- "Pre-consumer" recycled paper is made from wood and paper scraps that have never been manufactured into other products (like the cut off corners of envelope flaps).

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## PILES OF PAPER

3

- "Reduce, reuse, recycle" describes three ways to conserve natural resources and prevent trash in landfills. All three options help the environment, however reducing is the most effective method because it prevents waste in the first place.
- Reducing resources means buying less. Then there isn't any waste to deal with. Using email instead of sending letters is an example of reducing waste.
- Using both sides of a sheet of paper or tailoring clothes in your closet instead of buying new ones are examples of reusing resources.
- Recycling breaks down products like newspapers, telephone books and computer paper into products that can be used again, like computer paper into school notebooks. Collecting paper products for recycling is the first step in this process. The last step is to purchase products made from recovered products.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## PILES OF PAPER

4

- Making paper from raw materials (trees) requires large amounts of water and energy. Paper manufacturing uses more oil than any other U.S. industry and is the third largest industrial user of electricity and coal.
- Most paper manufacturing uses chlorine bleaches and other chemicals linked to serious health problems. If not properly treated, these toxins may be released through waste water from paper plants into streams, rivers and the atmosphere.
- According to one estimate, when new paper is made from discarded paper instead of trees, 60% less water and 70% less energy are used, and the pollutants added to the environment are cut in half.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## PILES OF PAPER

5

- People often use paper and paper products for convenience rather than out of necessity. Putting groceries into a paper bag instead of a canvas one, cleaning with a paper towel instead of a rag, and using paper rather than cloth napkins are examples of this. Paper plates and straw covers are other examples of one-time use convenience items.
- Many manufacturers unnecessarily use excessive paper and cardboard to package a product. Buying in bulk eliminates some packaging waste.
- Paper and paperboard products make up the largest portion of municipal solid waste in the U.S.

STUDENT PAGE

GENERATION EARTH

# TOPIC CARD:
# THE PROBLEM WITH PLASTIC

READ THIS AS A GROUP

**1**

When your grandparents, and maybe even your parents, were growing up, plastics weren't a big part of their lives. Today, plastics are used for everything from milk jugs and soda bottles to bicycle helmets and auto parts.

**2**

Each person reads his/her Check This Out card and takes notes (you will need them later!)

**3**

As a group, answer the following questions. Hint: Each team member has different information that will help.

## think about it!

1. A California law required each city and county in California to divert 50% of its solid waste from landfills and waste-to-energy facilities by the year 2000 through source reduction, recycling and composting. Most cities did not meet this goal and filed for extensions. Why is this goal important to us as students? Give at least three reasons.

2. What's the difference between reducing, reusing and recycling our wastes? Of the three actions, which do you think is most important? Why?

3. How does buying items, such as individually wrapped bags of chips, relate to plastics and packaging disposal issues?

4. What can we do to encourage manufacturers to reduce the oil used for packaging and other one-time uses of plastics?

5. How can we encourage our classmates and others at school and in our community to help reduce the oil used for packaging and other one-time use plastic products?

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE PROBLEM WITH PLASTIC

1

- Plastics are made from oil, a non-renewable natural resource limited in supply.
- Manufacturing plastic requires large quantities of water and energy resources. Plastic manufacturing also produces harmful chemicals that if not properly treated may pollute our water and air systems.
- Plastic packaging is often found as litter on the streets and in the ocean. Marine animals sometimes mistake six-pack rings, plastic bags and other plastic items floating in the ocean as food. In the central North Pacific Ocean, there are six pounds of plastic for every pound of zooplankton.
- Some plastics are bulky and hold their shape and are therefore hard to compact for proper disposal in landfills. Some studies estimate that plastics take up 32% of landfill space.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE PROBLEM WITH PLASTIC

2

- The packaging industry is the biggest user of plastics. Because plastics are lightweight, long-lasting, waterproof, see-through and easily made into almost any shape, they are cost-effective and useful for packaging.
- Manufacturers use excessive packaging to appeal to customers.
- Plastics are designed to last a long time, yet are often only used in packaging that is thrown away.
- Each year, the average student produces about 29 lbs. of plastic waste that ends up in landfills. Less than 5% of plastic ever gets recycled.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE PROBLEM WITH PLASTIC

3

- Plastics do not easily decompose. Even those designed to degrade only break down into smaller pieces rather than entirely decomposing. These plastics break down only when exposed to sunlight; therefore, they generally do not decompose when disposed of in landfills.
- An alternative to throwing plastic in the trash is to recycle it for money. In many states, including California, a law requires a small deposit on PET (polyethylene teraphthalate) bottle purchases. The state refunds your deposit when you return the bottle for recycling.
- Recycled plastic can be used to make products as varied as benches, clothing, and bags. Although legal elsewhere in the world, making food containers out of recycled plastic is not legal in the United States.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE PROBLEM WITH PLASTIC

4

- Many products contain more than one type of plastic, each providing a different characteristic. Combining plastics can make a product almost impossible to recycle since different plastics require different recycling processes.
- The plastics industry has a coding system to help people and industries recycle plastic. These codes are found on the bottom of many plastic packages, imprinted inside a small recycling symbol. Items coded with a 1 or 2 are commonly easy to recycle. These plastics are turned into carpets, clothing, non-food containers, motor oil or detergent bottles, pipes, pails and other new products.
- It is hard to find markets for recycled items marked with codes 3, 4, 5, 6 or 7. Without a source to sell these recycled plastics to, recyclers put less emphasis on these materials. New markets for these plastics are currently being created in the U.S. and other countries.

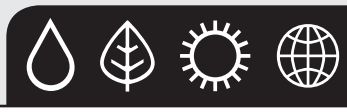
STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE PROBLEM WITH PLASTIC

5



- "Reduce, reuse, recycle" describes three ways to conserve natural resources and prevent trash in landfills and the ocean. All three options help the environment, however reducing is the most effective method because it prevents waste in the first place.
- Reducing resources means buying less. Then there isn't any waste to deal with. Not buying individually packaged foods and avoiding plastic wrap are ways to reduce plastic waste.
- Drinking from a reusable commuter mug or bringing lunch to school in a lunch box are examples of reusing resources.
- Recycling breaks down plastic products like water bottles and food containers into other things that can be used again, like bottles into cloth shopping bags. By collecting these products for recycling and then buying new products made from recycled goods, we are fully participating in the recycling process.

STUDENT PAGE

GENERATION EARTH

# TOPIC CARD: THE ROTTEN TRUTH

READ THIS AS A GROUP

**1**

If you were to look into the school dumpster after lunch one day, you'd find plenty of food literally going to waste. When it comes to composting, that garbage is gold! Many food and yard wastes can be composted – or recycled – into nutrient-rich soil.

**2**

Each person reads his/her Check This Out card and takes notes (you will need them later!)

**3**

As a group, answer the following questions. Hint: Each team member has different information that will help.

## think about it!

1. A California law required each city and county in California to develop programs that divert 50% of its solid waste from landfills and waste-to-energy facilities by the year 2000 through source reduction, recycling and composting. Most cities did not meet this goal and filed for extensions. Why is this goal important to us as students? Give at least three reasons.

2. What are some advantages of composting our food and yard wastes?

3. If we wanted to compost at school or at home, where would we start?

4. How can we encourage our classmates, friends, and neighbors to help reduce the amount of compostable materials being disposed of in landfills?

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE ROTTEN TRUTH

**1**

- Composting is a kind of recycling – recycling the nutrients and minerals found in once-living things, specifically food and yard wastes.
- As food decays, bacteria, fungi, worms and other tiny organisms break it down into nutrient-rich soil called humus or compost.
- Composting produces rich soil that can be used in home, school or community gardens, farms, and flower beds. Compost can even be used to keep house plants healthy.
- Plants get nutrients from the soil in which they're growing. Healthy soil needs a constant supply of nutrients.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE ROTTEN TRUTH

**2**

- Approximately 36% of the trash in L.A. landfills is made up of food scraps and yard waste.
- Organics, food waste and green waste make up about 31% of the total waste generated at each school in Los Angeles County.
- Each year, the average student produces about 48 lbs. of food waste that ends up in landfills. That equals 155,000 tons of food waste that schools produce and dispose of each year in area landfills.
- All yard waste (branches, grass clippings, fallen leaves) and non-dairy or meat food scraps can be composted. Shredded paper and saw dust can also be composted.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE ROTTEN TRUTH

**3**

- About 30% of California's waste can be composted. Large-scale composting is used in some communities to keep yard waste out of landfills. Los Angeles County has several active composting facilities to recycle yard waste and sewage sludge (the waste left after sewage is treated).
- In large-scale composting, sometimes paper products with coatings, and certain types of inks or trace metals get into the compost mix. These items can contaminate the compost, making it unsafe to use.
- Organizations like the Los Angeles County Department of Public Works, the California Integrated Waste Management Board, as well as environmental centers, nature centers, garden centers, and recycling centers can provide information about composting at home or in your community. To find out more about composting in Los Angeles County, call 1-888-CLEAN-LA or visit www.smartgardening.com.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE ROTTEN TRUTH

**4**

- Composting food waste is a waste management technique that can be completed right at home.
- If you have a backyard, you can compost outdoors with a few bricks or wooden boxes and a shovel. Using worms, you can compost indoors in any small, dark space. Some people keep worm bins under the kitchen sink. Worm composting is called vermicomposting.
- Several simple conditions must be met for composting to work well. Air and moisture must be present. There must be a large enough quantity of composting material to keep the bacteria alive, and a good balance between wet and dry materials (browns and greens). Compost must be turned occasionally to keep the lower levels full of air.
- Decaying food doesn't have to stink! In well-maintained composting facilities, decomposition occurs relatively quickly and does not produce bad odors or toxic gases.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## THE ROTTEN TRUTH

5

- In natural systems, nutrients are returned to the topsoil – the nutrient-rich layer of soil where plants grow – through decomposition of dead plants and animals.
- In urban areas – where dead animals and plants aren't often left to rot and replenish the soil – compost can play an important role in keeping soil healthy.
- Some agricultural practices deplete the soil of nutrients needed for crop growth and lead to loss of topsoil. Loss of topsoil creates poor soil quality in many areas throughout the world.
- Composting can help replenish the soil without the use of chemical fertilizers. Chemical fertilizers used on crops are sometimes washed into waterways that end up polluting streams, lakes, rivers and other water sources.

STUDENT PAGE

# GENERATION EARTH TOPIC CARD:
# HAZARDOUS HAPPENINGS

READ THIS AS A GROUP

**1**

You may not think of your home as a storage place for dangerous products, but check the labels on the cans and bottles under the sink: all products labeled "corrosive," "flammable," "irritant," or "poison" contain hazardous compounds. Consumer electronics, including cell phones, computers and televisions, contain potentially harmful substances that can get into the environment. Hazardous wastes contain potentially toxic substances that can be harmful to human health or the environment, especially if not disposed of properly.

**2**

Each person reads his/her Check This Out card and takes notes (you will need them later!)

**3**

As a group, answer the following questions. Hint: Each team member has different information that will help.

## think about it!

1. Why is it important to us as students to help keep hazardous materials out of Los Angeles landfills? Give at least three reasons.
2. How can we safely dispose of household hazardous wastes?
3. What effect does buying batteries or cleaning supplies have on the environment?
4. What can we do to encourage manufacturers to reduce the number of toxic household products they make?
5. How can we encourage our classmates, friends, and neighbors to help reduce the toxic substances being used at home or school?

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## HAZARDOUS HAPPENINGS

1

- Only about 1% of household waste is estimated to be made up of hazardous compounds, but it has the greatest potential to pollute the environment through improper and often illegal disposal.
- Many common household products turn into hazardous wastes. Products like bathroom cleaners, batteries, bug spray, disinfectants, drain cleaners, empty aerosol cans, floor care products, glue, lighter fluid, moth balls, motor oil, nail polish remover, oven cleaners, oil-based paints, perfumes, rat poison, and window cleaners are all examples of hazardous waste.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## HAZARDOUS HAPPENINGS

2

- It is illegal to dispose of most hazardous wastes in a landfill or waste-to-energy facility, a place that turns garbage into electricity.
- If we throw hazardous materials into the trash at home or at school, they will most likely end up in landfills or at waste-to-energy facilities throughout Los Angeles County.
- Workers are sometimes hurt by unknowingly handling toxic materials that have been thrown into the trash.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## HAZARDOUS HAPPENINGS

3

- Chemicals from hazardous wastes do not easily degrade. Once in the environment, they last an extremely long time, continuing to be a serious health hazard.
- Once hazardous chemicals get into the water system – whether through the drain or the gutter– they can be taken up into plants through their roots. As the plants move their way up the food chain to larger and larger animals, the chemicals accumulate in a process called bio accumulation. As a result, animals high on the food chain can die from eating large doses of toxic chemicals.
- Humans eat high on the food chain and can be harmed by eating goods containing large concentrations of toxic chemicals.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## HAZARDOUS HAPPENINGS

4

- Electronics may contain lead, copper, and other heavy metals or potentially toxic substances. This makes it critical to reduce e-waste by only buying what you need, reusing electronics that still work, and recycling them at the end of their useful life cycle.
- The Household Hazardous Waste Collection Program in Los Angeles County is a good way to dispose of hazardous household products. Through the program, residents can bring many kinds of unwanted chemicals and electronics, free of charge, to roundup locations throughout the county or to one of the five permanent collection facilities for proper disposal. Call 1-888-CLEAN-LA for collection facility locations and event dates in your area.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## HAZARDOUS HAPPENINGS

5

- Hazardous materials are almost always labeled and include directions for proper disposal. Some must be taken to special collection sites designed for household hazardous materials.
- There are safe alternatives to many household hazardous materials. For instance, vinegar and baking soda can be used in place of window cleaners and cleansers.
- One of the best ways to avoid the dangers of household hazardous wastes is not to buy them in the first place.

STUDENT PAGE

GENERATION EARTH

# TOPIC CARD:
# DON'T TRASH THE NEIGHBORHOOD

READ THIS AS A GROUP

**1**

Ever take a walk in your neighborhood and see abandoned furniture, tires, appliances or other unwanted items dumped in alleys, vacant lots, and other open spaces? Dumping these items is not only ugly; it's unsafe and illegal! People caught illegally dumping trash or unwanted items may be subject to a $4,000 fine and six months in jail.

**2**

Each person reads his/her Check This Out card and takes notes (you will need them later!)

**3**

As a group, answer the following questions. Hint: Each team member has different information that will help.

## think about it!

1. What have you seen around your neighborhood or elsewhere that may have been illegally dumped?
2. Name three reasons it is important to us as students to help prevent illegal dumping in our neighborhoods.
3. What can we do to encourage our classmates, friends, and neighbors to help reduce illegal dumping in our neighborhoods?

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## DON'T TRASH THE NEIGHBORHOOD

1

- Properly disposing of large items requires that dumping fees be paid to a recycle facility or landfill. To avoid these fees, some residents and waste haulers dump their stuff anywhere they want.
- Some businesses pay independent contractors to haul away trash. Sometimes, the contractors dump wastes illegally rather than pay landfill fees so they can make more money. The business owners may or may not know their trash is not being disposed of safely and legally.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## DON'T TRASH THE NEIGHBORHOOD

2

- Illegal dumping saves money for the "dumper," but costs you money in the end. The Los Angeles County and its cities have to spend millions of tax dollars to clean up trash and unwanted items dumped in alleys and streets. If everyone disposed of their materials legally and properly, this money could be used for schools or other causes.
- Some individuals and businesses have been caught illegally dumping toxic chemicals into the Los Angeles River to avoid fees or to get around obtaining permits. This can seriously impact drinking water, and have damaging effects on plants and animals throughout the water system.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## DON'T TRASH THE NEIGHBORHOOD

3

- Illegally dumped trash and unwanted items can attract insects and rodents creating health and safety concerns. Rodents can spread disease, chew through wiring, and otherwise harm the environment and human health.
- As some illegally dumped items degrade and break down, they can add hazardous metals to the ground and waterways.
- Televisions, computers, and other electronic waste (e-waste) have cathode ray tubes, which contain lead. Many e-waste items are considered hazardous waste to the environment. E-waste should be donated, properly recycled or disposed of by a hazardous waste facility.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## DON'T TRASH THE NEIGHBORHOOD

4

- People caught dumping illegally can be fined up to $4,000 and jailed for six months. However, it is often difficult for local law enforcement agents to catch these criminals. Citizens who want to help prevent illegal dumping can call law enforcement agencies and report these offenses on their own.
- There are programs available in most cities to help with the disposal of large, bulky items and household hazardous wastes. Los Angeles County residents can call their local waste hauler, city recycling coordinator or 1-888-CLEAN-LA for help.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## DON'T TRASH THE NEIGHBORHOOD

5

- Haulers who dump illegally usually don't do it in their own backyards. They look for places where they won't get caught. They could be dumping illegally right in your neighborhood.
- Periodic neighborhood cleanup projects may discourage illegal dumping. It is believed that illegal dumpings are less likely to happen in clean, watched neighborhoods than in areas that are already full of trash.

STUDENT PAGE

# TOPIC CARD:
# POLLUTION GOING DOWN THE DRAIN

READ THIS AS A GROUP

**1**

The rectangular openings or "catch basins" at the end of your street are more important than you may realize. Street gutters drain water off the streets through catch basins and storm drains. These openings lead to flood control channels that, in turn, carry the water directly to the ocean. With it goes everything that the water picks up as it travels through streets and into the ocean.

**2**

Each person reads his/her Check This Out card and takes notes (you will need them later!)

**3**

As a group, answer the following questions. Hint: Each team member has different information that will help.

## think about it!

1. When it comes to rainfall, how do urban areas differ from natural areas? What causes stormwater runoff in urban areas?
2. What are some common trash items that end up in our stormwater runoff? Where do these pollutants come from?
3. Name three reasons it is important to us as students to prevent polluted stormwater runoff.
4. What can we do to encourage our classmates, friends, and neighbors to help reduce stormwater runoff pollution?

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## POLLUTION GOING DOWN THE DRAIN

1

- In natural settings, rainwater hits the ground and seeps into the soil helping to replenish underground water supplies.
- In urban environments, most rainfall never reaches the soil that is underneath paved surfaces. Instead, it hits our streets and runs across pavement, through gutters, and into storm drains. This water is called runoff.
- Storm drains help prevent urban flooding by carrying large volumes of urban runoff through concrete flood channels to the ocean. Water that enters storm drains on the streets is carried directly to the ocean. Many residents do not realize that water from Los Angeles goes straight to the ocean without treatment.

STUDENT PAGE

GENERATION EARTH

# CHECK THIS OUT

## POLLUTION GOING DOWN THE DRAIN

2

- Since many compounds and chemicals easily dissolve in water, urban runoff carries with it almost anything dumped into a gutter or storm drain. Urban runoff is a significant source of ocean pollution.
- Litter, dog excrement, cigarette butts, fast food packaging, plastic shopping bags, gum, leaking motor oil – anything on the ground – can end up washed into gutters and carried to the ocean.
- Pollution from urban runoff creates health risks for children, kills marine life, and causes beach closures. Beach cities discourage swimming after a storm because of elevated bacteria levels in the water.

STUDENT PAGE